CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1 – 156. (cancelled without prejudice)

157. (currently amended) A computer readable medium having one or more non-transitory sequences of instructions tangibly stored therein, which when executed cause a the processor in a computer to perform a series of steps risk management optimization method, comprising:

preparing data from a plurality of enterprise transaction systems and one or more external databases for use in processing;

measuring a plurality of risks using at least a portion of said data under a plurality of scenarios;

identifying one or more risk management activities based upon said risks;

calculating an amount of capital available for said risk management activities using at least a portion of said data; and

determining a combination of said risk management activities that optimizes aspects of an enterprise financial performance selected from the group consisting of market value, risk and combinations thereof within a constraint of the available capital

where the market value comprises one or more real options and where the risk comprises at least one contingent liability.

158. (currently amended) The computer readable medium of claim 157, wherein measuring a plurality of risks further comprises quantifying risks under the plurality of scenarios consists of scenarios selected from the group consisting of normal, extreme and a combinations thereof.

159. (currently amended) The computer readable medium of claim 157, wherein the a market value further comprises one or more categories of value selected from the group consisting of an current operation, real option, market sentiment and combinations thereof.

160. (currently amended) The computer readable medium of claim 157, wherein the a risk management activity is activities are selected from the group consisting of establishing one or more risk management control systems, completing one or more risk transfer transactions and combinations thereof.

161. (currently amended) The computer readable medium of claim 160, wherein establishing each of the one or more risk management control systems further comprises identifying a risk

reduction activity and optionally establishing a method for implementing said activity in an automated fashion.

162. (currently amended) The computer readable medium of claim 160, wherein completing the one or more risk transfer transactions further comprises completing activities selected from the group consisting of insurance purchases, derivate transactions, and combinations thereof.

163. (currently amended) The computer readable medium of claim 157, wherein ~~identifying and~~ measuring the ~~a~~ plurality of risks further comprises: developing a computational model of ~~organization~~ the market value by category of value, element of value and external factor by completing a series of multivariate analyses in an automated fashion ~~using at least a portion of the data,~~ and quantifying the ~~a~~ plurality of risks by a category of value using said model~~,~~

    where the categories ~~a category~~ of value are ~~is~~ selected from the group consisting of current operation, real option, market sentiment and combinations thereof.

164. (currently amended) The computer readable medium of claim 163, wherein the series of steps ~~method~~ further comprises ~~quantifying~~ measuring the plurality of risks by element of value and external factor where the elements of value physically exist and are selected from the group consisting of alliances, brands, customers, ~~customer relationships,~~ employees, ~~employee relationships, infrastructure, intellectual property,~~ information technology, partnerships, processes, production equipment, vendors, ~~vendor relationships~~ and combinations thereof.

165. (currently amended) The computer readable medium of claim 157 that further supports an optimization of one or more aspects of financial performance selected from the group consisting of current operation value, real option value, market sentiment value and combinations thereof.

166. (currently amended) The computer readable medium of claim 157, wherein determining an optimal combination of risk management activities further comprises using an algorithm ~~method~~ selected from the group consisting of quasi Monte Carlo, genetic algorithm, multi-criteria linear programming ~~optimization~~ and linear programming.

167. (currently amended) The computer readable medium of claim 157, wherein ~~the method further comprises: using one or more shadow prices from a linear programming optimization calculation to identify an optimal budget for risk management activities~~ the plurality of risks comprise one or more risks selected from the group consisting of event risks, volatility and contingent liabilities and a measured risk consists of an expected reduction in the market value

where the expected reduction in value from the contingent liabilities is measured using a real option algorithm.

168. (currently amended) The computer readable medium of claim 157, wherein ~~preparing data from a plurality of enterprise transaction systems for use in processing further comprises: using metadata mapping to convert, integrate and store a plurality of enterprise related data from a plurality of enterprise related systems in accordance with a metadata standard where a metadata standard is selected from the group consisting of xml and metadata coalition specification and a metadata mapping table is used to support the integration, conversion and storage of data~~ the enterprise physically exists and the market value further comprises at least one category of value where a change in a value of said category of value is nonlinear and dependent upon at least two of one or more elements of value and one or more external factors and wherein a value of the contingent liability is dependent upon at least two of one or more elements of value and one or more external factors.

169. (currently amended) A risk management optimization system, comprising:
networked computers each with a processor having circuitry to execute instructions; a storage device available to each processor with one or more sequences of instructions stored therein, which when executed cause the processors to:
prepare data from a plurality of enterprise ~~transaction~~ systems, the Internet, and one or more external databases for ~~use in~~ processing;
developing a model of an enterprise market value from said data,
measure a plurality of risks using at least a portion of said data under a plurality of scenarios with said model;
identify one or more risk management activities based upon said risks;
calculate an amount of capital available for said risk management activities using at least a portion of said data; and
determine a combination of said risk management activities that optimizes aspects of an enterprise financial performance selected from the group consisting of market value, risk and combinations thereof within a constraint of the available capital
where the market value comprises one or more categories of value where a change in a value of said category of value is nonlinear and where the risk comprises at least one contingent liability.

170. (currently amended) The system of claim 169, wherein ~~measuring a plurality of risks further comprises quantifying risks under~~ the plurality of scenarios are selected from the group consisting of normal, extreme and a combinations thereof.

171. (currently amended) The system of claim 169, wherein the ~~a market value further comprises~~ one or more categories of value are selected from the group consisting of current operation, real option, market sentiment and combinations thereof.

172. (currently amended) The system of claim 169, wherein the combination of a risk management ~~activity is~~ activities are selected from the group consisting of establishing one or more risk management control systems, completing one or more risk transfer transactions and combinations thereof.

173. (currently amended) The system of claim 172, wherein establishing each of the one or more risk management control systems further comprises identifying a risk reduction activity and optionally establishing a method for implementing said activity in an automated fashion.

174. (currently amended) The system of claim 172, wherein completing the one or more risk transfer transactions further comprises completing activities selected from the group consisting of insurance purchases, derivate transactions, and combinations thereof.

175. (currently amended) The system of claim 169, wherein ~~identifying and~~ measuring a plurality of risks further comprises: developing a computational model of ~~organization~~ the market value by category of value, element of value and external factor ~~by completing a series of multivariate analyses in an automated fashion using composite applications and at least a portion of the data,~~ and quantifying a plurality of risks by a category of value using said model,
    where the categories ~~a category~~ of value are ~~is~~ selected from the group consisting of current operation, real option, market sentiment and combinations thereof.

176. (currently amended) The system of claim 169 ~~175,~~ wherein ~~a series of multivariate analyses are selected from the group consisting of identifying one or more previously unknown item performance indicators, discovering one or more previously unknown value drivers, identifying one or more previously unknown relationships between one or more value drivers, identifying one or more previously unknown relationships between one or more elements of value, quantifying one or more inter-relationships between value drivers, quantifying one or more impacts between elements of value, developing one or more composite variables,~~

~~developing one or more vectors, developing one or more causal element impact summaries,~~ ~~identifying a best fit combination of predictive model algorithm and element impact summaries~~ ~~for modeling enterprise market value and each of the components of value, building predictive~~ ~~models using transaction data, determining a net element of value impact for each category of~~ ~~value, determining a relative strength of the elements of value between two or more enterprises,~~ ~~developing one or more real option discount rates, calculating one or more real option values,~~ ~~calculating an enterprise market sentiment value by element, developing a covariance matrix,~~ ~~developing a series of scenarios, simulating a financial performance under a given scenario and~~ ~~combinations thereof~~ the enterprise physically exists and the enterprise market value comprises at least one category of value where a change in a value of said category of value is nonlinear and dependent upon at least two of one or more elements of value and one or more external factors and wherein a value of the contingent liability is dependent upon at least two of one or more elements of value and one or more external factors.

177. (currently amended) The system of claim 169, wherein ~~the method further comprises~~ ~~quantifying~~ measuring the plurality of risks further comprises measuring the risks by element of value and external factor where the elements of value physically exist and are selected from the group consisting of alliances, brands, customers, ~~customer relationships,~~ employees, ~~employee~~ ~~relationships, infrastructure, intellectual property,~~ information technology, partnerships, processes, production equipment, vendors, ~~vendor relationships~~ and combinations thereof.

178. (currently amended) The system of claim 169 that further supports an optimization of one or more aspects of financial performance selected from the group consisting of current operation value, real option value, market sentiment value and combinations thereof as well as an identification of one or more activities that are not related to risk management that optimize the market value or the combination of the market value and risk.

179. (currently amended) The system of claim 169, wherein determining an optimal combination of risk management activities further comprises using an algorithm ~~method~~ selected from the group consisting of quasi Monte Carlo, genetic algorithm, multi-criteria mixed integer ~~optimization~~ and linear programming.

180. (currently amended) The system of claim 169, wherein the ~~method further comprises:~~ ~~using one or more shadow prices from a linear programming optimization calculation to identify~~ ~~an optimal budget for risk management activities~~ the plurality of risks are selected from the

group consisting of event risks, contingent liabilities and volatility and the measured risks each consist of an expected reduction in the market value where the expected reduction in market value from the contingent liabilities is measured using a real option algorithm.

181. (currently amended) The system of claim 169, wherein preparing data from a plurality of enterprise ~~transaction~~ systems and external databases for ~~use in~~ processing further comprises: converting and storing ~~a plurality of enterprise related data from a plurality of enterprise related systems~~ said data in accordance with a metadata mapping where the metadata consists of an xml or metadata coalition metadata standard.

182. (withdrawn) A computer readable medium having sequences of instructions stored therein, which when executed cause the processor in a computer to perform a data method, comprising: using metadata mapping to integrate a plurality of enterprise related data from a plurality of enterprise related systems in accordance with a metadata standard where a metadata standard is selected from the group consisting of xml and metadata coalition standard.

183. (withdrawn) The computer readable medium of claim 182 where a plurality of enterprise related systems further comprise transaction systems that are selected from the group consisting of advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems, channel management systems, intellectual property management systems, process management systems, vendor management systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, enterprise resource planning systems (ERP), material requirement planning systems (MRP), scheduling systems, supply chain systems, quality control systems, purchasing systems, risk management systems, the Internet and combinations thereof.

184. (withdrawn) The computer readable medium of claim 182 wherein metadata mapping is guided by a metadata mapping table.

185. (withdrawn) The computer readable medium of claim 184 wherein a metadata mapping table is established using a metadata and conversion rules window.

186. (withdrawn) The computer readable medium of claim 182 where a data method further comprises storing a plurality of integrated data in one or more tables to support organization processing.

187. (withdrawn) The computer readable medium of claim 182 where a data method further comprises converting a plurality of enterprise related data from a plurality of organization related systems to a common schema at the time of integration.

188. (withdrawn) The computer readable medium of claim 187 where a common schema defines common attributes selected from the group consisting of categories of value, components of value, elements of value, enterprise designations, risks, time periods, units of measure and combinations thereof

189. (withdrawn) The computer readable medium of claim 187 where a data method further comprises storing a plurality of converted and integrated enterprise related data in one or more tables to support organization processing.

190. (withdrawn) The computer readable medium of claim 182 where a data method further comprises converting a plurality of enterprise related data from a plurality of organization related systems to a common xml schema at the time of integration.

191. (withdrawn) The computer readable medium of claim 190 where a common xml schema defines common attributes from the group consisting of categories of value, components of value, elements of value, enterprise designations, time periods, units of measure and combinations thereof

192. (withdrawn) The computer readable medium of claim 190 where a data method further comprises storing a plurality of converted and integrated enterprise related data in one or more tables to support organization processing.

193. (withdrawn) The computer readable medium of claim 182 wherein a plurality of enterprise related data further comprises transaction data.

194. (withdrawn) A data method, comprising:

converting a plurality of enterprise related transaction data from a plurality of enterprise related systems to a common metadata standard

where a metadata standard is selected from the group consisting of xml and metadata coalition standard.

195. (withdrawn) The method of claim 194 where a plurality of enterprise related systems are selected from the group consisting of advanced financial systems, basic financial systems, alliance management systems, brand management systems, customer relationship management systems, channel management systems, intellectual property management systems, process management systems, vendor management systems, operation management systems, sales management systems, human resource systems, accounts receivable systems, accounts payable systems, capital asset systems, inventory systems, invoicing systems, payroll systems, enterprise resource planning systems (ERP), material requirement planning systems (MRP), scheduling systems, supply chain systems, quality control systems, purchasing systems, risk management systems, the Internet and combinations thereof.

196. (withdrawn) The method of claim 194 where a metadata mapping table and a conversion rules table are used to support said conversions of data.

197. (withdrawn) The method of claim 196 wherein a metadata and conversion rules window is used to establish a metadata mapping table and a conversion rules table.

198. (withdrawn) The method of claim 194 wherein a metadata standard defines a common schema where said common schema identifies data designations from the group consisting of components of value, sub components of value, known value drivers, elements of value, sub elements of value, non-relevant attributes and combinations thereof.

199. (withdrawn) The method of claim 194 where a data method further comprises storing a plurality of converted data in one or more tables to support organization processing.

200. (withdrawn) The method of claim 199 where one axis of each of one or more tables is defined by data designations from the group consisting of components of value, sub components of value, known value drivers, elements of value, non-relevant attributes and combinations thereof.

201. (currently amended) An advanced management method, comprising:

using a computer with a processor to complete at least one of the steps of:

aggregating and preparing data from a plurality of enterprise related systems, one or more external databases and the Internet for ~~use in~~ processing, ~~and learning from at least a portion of the data as required to quantify a tangible impact for a plurality of risks and one or more elements of value on one or more subsets of value selected from the group consisting of a category of value, a component of value and combinations thereof where one or more elements of value are selected from the group consisting of alliances, brands, customers, customer relationships, employees, employee relationships, infrastructure, intellectual property, information technology, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof, and where a plurality of risks are selected from the group consisting of event risks, contingent liabilities, volatility and combinations thereof~~

developing a model of an enterprise market value from said data,

measuring a plurality of risks using the model of enterprise market value and at least a portion of said data under a plurality of scenarios,

identifying one or more risk management activities based upon said risks;

calculating an amount of capital available for said risk management activities using at least a portion of said data; and

determining a combination of said risk management activities that optimizes aspects of an enterprise financial performance selected from the group consisting of the market value, the measured risks and combinations thereof within a constraint of the available capital

where the market value comprises one or more categories of value where a change in a value of at least one of the categories of value is nonlinear and where the measured risks comprise one or more expected reductions in the market value where a change in the value of at least one of the expected reductions in market value is nonlinear.

202. (currently amended) The method of claim 201, wherein the ~~method further comprises: identifying one or more risk management activities based upon one or more quantified risks; calculating an amount of capital available for said risk management activities using at least a portion of said data; and determining a combination of risk management activities that optimizes aspects of enterprise financial performance selected from the group consisting of market value, risk and combinations thereof within a constraint of the available capital~~ steps further comprise

identifying a combination of risk management activities that optimize one or more aspects of financial performance selected from the group consisting of current operation value, real option value, market sentiment value and combinations thereof.

203. (currently amended) The method of claim 201, wherein ~~aggregating and preparing data from a plurality of enterprise related systems for use in processing, further comprises using metadata mapping to integrate and store data from said systems in accordance with a common schema~~ the one or more categories of value are selected from the group consisting of current operation, real option and market sentiment.

204. (currently amended) The method of claim 201, wherein ~~a category of value is selected from the group consisting of current operation, real option, market sentiment and combinations thereof and a component of value is selected from the group consisting of revenue, expense, capital and combinations thereof~~ the plurality of risks are selected from the group consisting of event risks, contingent liabilities and volatility and combinations thereof and the measured risks each consist of an expected reduction in the market value where the expected reduction in market value from the contingent liabilities is measured using a real option algorithm.

205. (currently amended) The method of claim 201, wherein ~~quantifying a plurality of risks further comprises quantifying risks under scenarios~~ the plurality of scenarios are selected from the group consisting of normal, extreme and combinations thereof where each of the scenarios comprise a forecast of a plurality of future values for a plurality of factors and indicators that have an impact on the market value.

206. (currently amended) The method of claim 201 ~~208~~, wherein the one or more ~~a~~ risk management ~~activity is~~ activities are selected from the group consisting of establishing one or more risk management control systems, completing one or more risk transfer transactions and combinations thereof.

207. (currently amended) ~~A management analysis method, comprising: aggregating and preparing data from a plurality of enterprise related systems for use in processing, and analyzing at least a portion of the data as required quantify an enterprise value and risk by one or more subsets of value selected from the group consisting of a category of value, a component of value, an element of value and combinations thereof where an element of value~~

~~is selected from the group consisting of alliances, brands, customers, customer relationships, employees, employee relationships, infrastructure, intellectual property, information technology, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof, where an enterprise value further comprises a market value, and where an enterprise risk further comprises a sum of a plurality of risks selected from the group consisting of event risks, contingent liabilities, volatility and combinations thereof~~ The method of claim 201, wherein measuring the plurality of risks further comprises measuring the plurality of risks by element of value and external factor for each of the categories of value where the elements of value physically exist and are selected from the group consisting of alliances, brands, customers, employees, information technology, partnerships, processes, production equipment, vendors, and combinations thereof.

208. (currently amended) The method of claim 201, ~~207 wherein aggregating and preparing data from a plurality of enterprise related systems for use in processing, further comprises using metadata mapping to integrate, convert and store data from said systems in accordance with a common schema~~ wherein the model of the enterprise market value identifies a contribution of one or more elements of value and one or more external factors to each of one or more categories of value, and wherein measuring the plurality of risks further comprises quantifying said risks by a category of value using said model, where the one or more categories of value are selected from the group consisting of current operation, real option, market sentiment and combinations thereof.

209. (currently amended) The method of claim ~~207, wherein the method further comprises: identifying one or more risk management activities based upon one or more quantified risks; calculating an amount of capital available for said risk management activities using at least a portion of said data; and determining a combination of risk management activities that optimizes aspects of enterprise financial performance selected from the group consisting of market value, risk and combinations thereof within a constraint of the available capital~~ 201, wherein the enterprise physically exists and the market value comprises at least one category of value where a change in a value of said category of value is nonlinear and dependent upon at least two of one or more elements of value and one or more external factors and the risk comprises at least one expected reduction in value that is nonlinear and dependent upon at least two of one or more elements of value and one or more external factors.

210. (currently amended) ~~The method of claim 207, wherein quantifying an impact for plurality of risks further comprises quantifying an impact for a plurality of risks under scenarios selected from the group consisting of normal, extreme and combinations thereof~~ A computer readable medium having a non-transitory sequence of instructions tangibly stored therein, which when executed causes at least one processor in a computer to perform a series of processing steps, comprising:

preparing data from a plurality of enterprise systems, the Internet and one or more external databases for processing;

developing a linear or nonlinear model of an enterprise value by learning from said data,

measuring a plurality of risks using the model of enterprise value under a plurality of scenarios;

identifying one or more risk management activities based upon said risks;

calculating an amount of capital available for said risk management activities using at least a portion of said data; and

determining a combination of said risk management activities that optimizes aspects of an enterprise financial performance selected from the group consisting of the enterprise value, the measured risks and combinations thereof within a constraint of the available capital.

211. (currently amended) The computer readable medium of claim 210, ~~method of claim 207~~ wherein the enterprise value model consists of one or more category of value models where the categories of value are ~~a category of value is~~ selected from the group consisting of current operation, real option, market sentiment and combinations thereof ~~and a component of value is selected from the group consisting of revenue, expense, capital and combinations thereof~~.

212. (currently amended) The computer readable medium of claim 210, ~~method of claim 209~~ wherein the one or more ~~a~~ risk management activities are ~~activity is~~ selected from the group consisting of establishing one or more risk management control systems, completing one or more risk transfer transactions and combinations thereof.

213. (currently amended) The computer readable medium ~~method~~ of claim 212, wherein completing the one or more risk transfer transactions further comprises completing activities selected from the group consisting of insurance purchases, derivate transactions and combinations thereof.

214. (currently amended) The computer readable medium of claim 210, ~~method of claim 207,~~

~~wherein the computer completes an additional step comprising reporting~~ <u>wherein the plurality of risks are selected from the group consisting of event risks, contingent liabilities, volatility and combinations thereof and the measured risks each consist of an expected reduction in the enterprise value where the expected reduction in enterprise value from the contingent liabilities is measured using a real option algorithm.</u>

215. (new) The computer readable medium of claim 210, wherein the series of steps further comprises measuring the plurality of risks by element of value and external factor where the elements of value physically exist and are selected from the group consisting of alliances, brands, customers, employees, information technology, partnerships, processes, production equipment, vendors and combinations thereof.

216. (new) The computer readable medium of claim 210 that further supports an optimization of one or more aspects of financial performance selected from the group consisting of current operation value, real option value, market sentiment value and combinations thereof as well as an identification of one or more activities that are not related to risk management that optimize the market value or the combination of the market value and risk.

217. (new) The computer readable medium of claim 210, wherein the enterprise value changes in a nonlinear manner and the measured risks change in a nonlinear manner

where the nonlinear change in the enterprise value comprises a change in a value selected from the group consisting of a nonlinear change in a value of a current operation, a nonlinear change in a value of a market sentiment category of value, a change in a value of one or more real options and combinations thereof, and

where the nonlinear change in the measured risks comprises a change in an expected reduction in value caused by a change in an expected reduction in value selected from the group consisting of a nonlinear change in an expected reduction in value of a current operation, a nonlinear change in an expected reduction in value of a market sentiment category of value, a change in a value of one or more contingent liabilities and combinations thereof.

218. (new) The computer readable medium of claim 210, wherein the enterprise value comprises at least one category of value where a change in a value of said category of value is nonlinear and dependent upon at least two of one or more elements of value and one or more external factors and the measured risks comprise at least one expected reduction in value that

is dependent upon at least two of one or more elements of value and one or more external factors.

219. (new) The computer readable medium of claim 210, wherein the plurality of scenarios consists of two or more scenarios selected from the group consisting of normal, extreme and a combination thereof where a scenario comprises a forecast of a plurality of future values for a plurality of factors and indicators.